

United States Department of Agriculture Forest Service



## Technology & Development Program

July 1995

2300

9523 1306—SDTDC

## URGENT NOTICE

COBWEBS ARE BLOCKING THE AIR FLOW IN MANY FOREST SERVICE VAULT AND PIT-TYPE TOILETS. REMOVING THE COBWEBS FROM THE TOILET VENT STACKS WILL IMMEDIATELY IMPROVE THE ABILITY OF VENTS TO REMOVE ODORS FROM THE TOILET BUILDINGS.

## TOILET VENT STACK MAINTENANCE

Brenda Land, Sanitary Engineer

## CLEANING TOILET VAULT VENT STACKS

Vault toilet vent stacks are a favorite home for spiders. They build their webs to catch the flies attracted by the vault odor. The webs also catch leaves and other wind blown debris. It does not take long for a convection vent to become completely blocked.

Vent stacks should be cleaned each spring as part of routine start-up maintenance. Remove any vent caps or turbines before cleaning the vent. Lower a chimney brush, chain, or weighted rope through the top of the vent pipe. Whirl it around to scrape the sides of the pipe to dislodge any spider webs and debris. Vent stacks with fans installed should also be cleaned each spring. Remove the fan, clean it. and check it for pitting and damage. Clean the vent stack and reinstall the fan. ALWAYS CHECK AIR FLOW AFTER SERVICING A FAN BY LAYING A PIECE OF TOILET PAPER ACROSS THE OPEN TOILET RISER. IF AIR IS COMING UP THROUGH THE THE RISER. FAN IS INSTALLED INCORRECTLY.

Check vent stacks monthly during the operating season for cobwebs. Adjust this recommended inspection schedule as needed for your site. Cobwebs may need to be removed weekly in some areas. Consider carefully the need to "cap" the vent pipe. San Dimas Technology and Development Center conducted wind tunnel tests of several vent cap designs in 1989. The tests showed that at low wind velocities, vent caps impede convection air flows. Vent caps also make inspecting and cleaning the vent stack more difficult.

Vent stack screens are another source of restriction and potential air blockage. Inspect and clean them frequently if they must be used. The screening material should not be smaller than eight mesh.

In the spirit of customer service, make every effort to provide customers with clean, odor free toilet facilities. Blocked vault vents cannot remove odor from the use compartment. Scheduling routine maintenance and inspections of the vent stacks will maintain optimum odor venting.

T



 $S_{\mathrm{an}}$   $D_{\mathrm{imas}}$   $T_{\mathrm{echnology}\,\&}$   $D_{\mathrm{evelopment}}$  Center sar Bonita Avenue San Dimas, California 91773